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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,713	10/08/2003	G. Bruce Poe	AUTO 116-C1	6721

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EXAMINER	
TIBBITS, PIA FLORENCE	

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/681,713	POE ET AL.	
	Examiner	Art Unit	
	Pia F Tibbits	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in answer to the continuation application filed on 10/8/2003.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fixed threshold circuit must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 15, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8: the recitation "the threshold signal is fixed" is not clear, because it contradicts the recitation in claim 1, upon which claim 8 depends, "a level of **the threshold signal changes in response to a voltage level of a power supply** that supplies the drive current to the drive circuit".

Additionally, the recitation in claim 8 contradicts the specification, which describes that "when a series resistor is utilized for monitoring the current delivered to the load by the drive circuit, setting a fixed threshold to a nominal voltage can prevent the monitoring circuit from detecting short circuits at the load at the lower voltage extreme when the fixed threshold is set above the value that can be achieved at the lower voltage. Thus, what is needed is a current sense circuit with a variable threshold that is capable of tracking variations in a power source output level", i.e., the threshold signal is variable.

Claim 15: the recitation "the threshold signal is fixed" is not clear, because it contradicts the recitation in claim 10, upon which claim 15 depends, "a level of **the threshold signal changes in response to a voltage level of a power supply** that supplies the drive current to the drive circuit".

Additionally, the recitation in claim 15 contradicts the specification, which describes that "when a series resistor is utilized for monitoring the current delivered to the load by the drive circuit, setting a fixed threshold to a nominal voltage can prevent the monitoring circuit from detecting short circuits at the load at the lower voltage extreme when the fixed threshold is set above the value that can be achieved at the lower voltage. Thus, what is needed is a current sense circuit with a variable threshold that is capable of tracking variations in a power source output level", i.e., the threshold signal is variable.

Claim 25: the recitation in claim 25 contradicts the scope of the invention as mentioned in the specification , which describes that "when a series resistor is utilized for monitoring the current delivered to the load by the drive circuit, setting a fixed threshold to a nominal voltage can prevent the monitoring circuit from detecting short circuits at the load at the lower voltage extreme when the fixed threshold is set above the value that can be achieved at the lower voltage. Thus, what is needed is a current sense circuit with a variable threshold that is capable of tracking variations in a power source output level". In order to continue prosecution it was assumed that a variable threshold is used.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-7, 9-14, 16-24, and 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6646847. Although the

conflicting claims are not identical, they are not patentably distinct from each other because they describe:

Claims 1-7, and 9: a current sense circuit, the circuit comprising a current sense device positioned to sense a drive current provided by a drive circuit to a load; and a voltage sense device coupled across the current sense device, the voltage sense device receiving a threshold signal at a first input and providing an output signal on an output whose value is dependent on whether a sense signal representing the sensed drive current and applied to a second input is above or below the variable threshold signal, wherein a level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive current to the drive circuit.

With regard to claim 1 the patent reciting as a limitation a variable threshold signal: since the level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive current to the drive circuit, it is an inherent function of the current sense circuit to vary the level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive current to the drive circuit, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent.**

Claims 10-14, and 16: a current sense circuit, the circuit comprising a sense resistor positioned to sense a drive current provided by a drive circuit to a load; and a differential amplifier having a positive input and a negative input coupled across the sense resistor, the differential amplifier receiving a threshold signal at the negative input and providing an output whose value is dependent on whether a sense signal representing the sensed drive current and applied to the positive input is above or below the threshold signal, wherein a level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive current to the drive circuit.

With regard to claim 10 the patent reciting as a limitation a variable threshold signal: since the level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive current to the drive circuit, it is an inherent function of the current sense circuit to vary the level of the threshold signal changes in response to a voltage level of a power supply that supplies the drive

current to the drive circuit, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent.**

Claims 17-24 and 26: a mirror assembly, comprising an electrochromic element; a drive circuit for providing a drive current to the electrochromic element; a current sense device positioned to sense the drive current provided by the drive circuit; and a voltage sense device coupled across the current sense device, the voltage sense device receiving a variable threshold signal at a first input and providing an output signal on an output whose value is dependent on whether a sense signal representing the sensed drive current and applied to a second input is above or below the variable threshold signal.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (571) 272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is (571) 272-2084.

8. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-2800.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 872-9306.

PFT

February 11, 2004